UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,564	07/06/2005	Jozef J. I. Van Dun	62996A	5827

109 7590 02/05/2009

The Dow Chemical Company
Intellectual Property Section
P.O. Box 1967
Midland, MI 48641-1967

EXAMINER	
GRAY, JILL M	

ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
02/05/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/541,564	VAN DUN ET AL.	
	Examiner	Art Unit	
	Jill Gray	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The rejection of claims 1, 3, 5, and 9 under 35 U.S.C. 102(b) as being anticipated by Gessner 5,108,827 is withdrawn in view of applicants' amendment.

The rejection of claims 1-9 and 14-15 under 35 U.S.C. 103(a) as being unpatentable over Choe et al., 5,654,097 in view of applicants' amendments.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-4 and 6-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gessner 5,108,827 in view of PCT Publication WO 01/49908 A2 (Newkirk).

Gessner discloses multiconstituent fibers composed of dispersed blends of at least two different immiscible thermoplastic polymers having a dominant continuous phase with at least one noncontinuous phase dispersed therein. See entire document, and for example abstract. In addition, while Gessner is silent as to the specific interfacial tension between his polymers, it is noted that he teaches the same type of polymers disclosed by applicants as being suitable. Accordingly, the examiner has reason to believe that the interfacial tension of the polymer mixtures disclosed by Gessner are within the instant claimed range in the absence of factual evidence to the contrary. Applicants are invited to provide such evidence. Gessner does not specifically disclose bicomponent fibers with a polyolefin continuous phase.

Newkirk teaches bicomponent and multicomponent fibers comprising a blend of polyolefins, wherein one embodiment includes the polymer components arranged in a sheath-core configuration and the sheath is formed of the polymer blend to impart the desired properties to the fibers. In addition, Newkirk teaches that his blends include immiscible and miscible polymer blends and that polyolefin can be the continuous phase. See entire document, and for example pages 4-5 and 9-12.

Though Gessner is silent as to the formation of bicomponent fibers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Gessner by forming bicomponent fibers with the reasonable expectation of success of producing fabrics and nonwovens having good tensile properties and excellent softness.

Regarding claims 6-7 and 10-19, Gessner is as set forth above, but does not specifically teach the melting point and glass transition point differential or that the disperse polymer is in particulate form or the thickness of the dispersed particulates. Also, Figure 1 discloses wherein the dispersed polymer comprises a portion of the fiber surface, per claims 18 and 19. Gessner discloses that the skilled artisan can select from several polymers commensurate with the desired end properties as long as the polymers are immiscible. It would have been obvious to one having ordinary skill in the art to choose the specific melting point differential and glass transition point differential during routine experimentation for optimization purposes. In addition, Gessner discloses that the dispersed phase exists as an elongated fibrillar polymer domain. The limitation with respect to the particulate thickness and particle size these requirements are drawn

to the size of the particles, wherein changes in size are not construed to be a matter of invention in the absence of factual evidence to the contrary. Regarding claims 6-7 and 10-11, Gessner teaches fibers comprising PE dispersed in a PP phase. This teaching would have provided motivation to the skilled artisan for multiconstituent fibers comprising a core of propylene polymer. Regarding the thickness of the sheath, this limitation would have been obvious to determine during routine experimentation. Moreover, this requirement is drawn to the size of the fiber and changes in size ordinarily are not a matter of invention.

Therefore, the combined teachings of Gessner and Newkirk would have rendered obvious the invention as claimed in present claims 1-4 and 6-19.

Response to Arguments

3. Applicant's arguments with respect to claims 1-4 and 6-19 have been considered but are moot in view of the new ground(s) of rejection.

No claims are allowed.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jill Gray
Primary Examiner
Art Unit 1794

/Jill Gray/
Primary Examiner, Art Unit 1794